



2023 University of Nottingham Annual Statement on Research Integrity

Contents

Section 1: Key contact information	2
Section 2: Promoting high standards of research integrity and positive research culture.	
Description of actions and activities undertaken	3
Actions and Activities that have been undertaken to support and strengthen understanding and the application of research integrity	3
2.1 .Overview - Institutional Strategy and Objectives to Strengthen Understanding of Research Integrity	3
2.2. Central- Current Systems and Culture, and Changes and Developments	3
2.3. Digital and Technology Services - Current systems and culture, and Changes and developments	7
2.4. Libraries- Current systems and culture, and Changes and developments	8
2.5. The Researcher Academy - Current systems and culture, and Changes and developments	8
2.6. Human Resources- Current systems and culture, and Changes and developments	10
2.7. Faculties - Current systems and culture, and Changes and developments	11
2.7.1. Undergraduate, Taught and Research Students:	11
2.7.2. Research and Teaching (RandT) Staff:	15
2.7.3. University of Nottingham Malaysia	19
2.7.4. University of Nottingham Ningbo China	20
2.8. Research Relating to Research Integrity	21
2.9. External Collaborations and Initiatives to Support Research Integrity	23
2.10. Internal Monitoring and Audit Processes	27
Section 3: Addressing Research Misconduct	28
3.1. Reporting and Handling Allegations of Research Misconduct	28
3.2. Anonymised Summary on Investigations into Allegations of Research Misconduct	28
3.3. Lessons Learned and Identified Needs	29
4. Closing statement	29

Context

This is the *tenth annual statement on Research Integrity* that the University of Nottingham (referred to as 'the University' hereafter) on the actions and activities undertaken for the period between **1 July 2022 and 30 June 2023** to sustain and further enhance research integrity in the University. To demonstrate the University's commitment to the Concordat to Support Research Integrity¹ (the Concordat hereafter) and the majority of UK and EU research funders (e.g. UK Research and Innovation (UKRI), Wellcome Trust, National Institute for Health and Care Research (NIHR) etc.), the University has identified and made publicly available a named person who will act as a first point of contact for anyone wanting more information on matters of research integrity, and act as confidential liaison for any person wishing to raise concerns about the integrity of research being conducted under the University's auspices. In addition, the University publishes and releases publicly through its website, an annual statement on how it is meeting the requirements of the revised concordat for accountability and assurance on activities undertaken in support of research integrity. (<https://www.nottingham.ac.uk/research/ethics-and-integrity/index.aspx>)

This annual statement, coordinated by Research and Innovation, has been developed following the guidelines and suggested structure of the statement from the UK Research Integrity Office (UKRIO) self-assessment tool and in line with commitment five of the Concordat. It provides a wide-ranging summary of actions and activities undertaken across the University to support and strengthen the understanding and application of research integrity, including addressing allegations of misconduct. This information was collected through a survey of activities supporting research integrity conducted across Faculties and relevant departments within Professional Services by the Head of Research Integrity. Each of the five Faculties, the University's International Campuses (UNM and UNNC), Human Resources, the Researcher Academy, Digital Research, Libraries and Student Services has responded separately.

This report has been reviewed by the Pro-Vice-Chancellor for Research and Knowledge Exchange, the Chair of the University Research Integrity and Research Ethics Committee and approved by the latter Committee in line with its delegated responsibility from Council.

Section 1: Key contact information

1A. Name of organisation	University of Nottingham
1B. Type of organisation: higher education institution/industry/independent research performing organisation/other (please state)	Higher Education Institution
1C. Date statement approved by governing body	(24/01/2024)
1D. Web address of organisation's research integrity page (if applicable)	https://www.nottingham.ac.uk/research/ethics-and-integrity/
1E. Named senior member of staff to oversee research integrity.	Professor Tom Rodden Pro-Vice Chancellor Research and Knowledge Exchange
1F. Named member of staff who will act as a first point of contact for anyone wanting more information on matters of research integrity	Ali Alshukry Head of Research Integrity, Governance and Compliance ali.alshukry@nottingham.ac.uk

¹ <https://www.universitiesuk.ac.uk/sites/default/files/field/downloads/2021-08/Updated%20FINAL-the-concordat-to-support-research-integrity.pdf> <https://www.universitiesuk.ac.uk/topics/research-and-innovation/concordat-support-research-integrity>

Section 2: Promoting high standards of research integrity and positive research culture. Description of actions and activities undertaken

Actions and Activities that have been undertaken to support and strengthen understanding and the application of research integrity.

The University is committed to 'The Concordat to Support Research Integrity' and its values through which trust and confidence in research stem, and from which the value and benefits of research flow. The University, through the various functions and departments, continues to publish, improve, update, and deliver a range of policies, guidance, training, resources to ensure a research environment characterised by our culture of research integrity, good research practice, and the development and training of researchers at all stages of their careers and to assist all staff and students involved in research to meet legal and ethical requirements and help prevent research misconduct.

Below is a breakdown of the activities and actions undertaken within the University at the different levels and functions:

2.1 . Overview - Institutional Strategy and Objectives to Strengthen Understanding of Research Integrity

Research integrity thrives in a positive research culture and environment and the University of Nottingham is committed to enhancing the culture in which research integrity is maintained. The University continues to review the processes and procedures for managing research integrity at an institutional level, with strong leadership by the **University Research Integrity and Research Ethics Committee (URIEC)**². URIEC oversees and defines research integrity and research ethics policies, establishes the University's process and procedures for providing oversight of research integrity and ethical review, provides quality assurance of such procedures, ensures and monitors best practice of research integrity and research ethics across the University, advises the Research Committee on research integrity and research ethics components of the Code of Research Conduct and Research Ethics, and legal and statutory requirements, champions the training and the embedding of a culture of research integrity and good practice across all areas of the University and reviews and approves this University's Annual Statement on Research Integrity.

The Head of Research Integrity, Risk and Compliance acts as the Secretary for URIEC and is the point of contact and liaison for all Research Integrity matters across the University including research misconduct queries and investigations³.

2.2. Central - Current Systems and Culture, and Changes and Developments

2.2.1. The University's Code of Research Conduct and Research Ethics⁴ (referred to as 'the Code' hereafter) provides a comprehensive framework for good research conduct, research ethics principles and the governance of all research carried out across the University, including the University's international campuses. The Code underpins the University's commitment to maintaining the highest standards of integrity, rigour and excellence in all aspects of our research and for all research to be conducted according to the appropriate ethical, legal and professional frameworks and standards. The Code is a fundamental component of the research environment, which is characterised by our culture of research integrity, good research practice, and the development and training of researchers at all stages of their careers.

² <https://www.nottingham.ac.uk/governance/universitycommittees/research-ethics.aspx>

³ <https://www.nottingham.ac.uk/research/ethics-and-integrity/>

⁴ <https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/Code-of-conduct.aspx>

The Code has been reviewed, revised and published new version (v9) in March 2023 in the light of feedback from colleagues and to reflect the changes in the ever-evolving research landscape.

The recent revision, in addition to updating the template, contact details and broken links, and minor typos, included:

- under definition “Research/Research Project:” addition of *“for the purpose of this code, means a discrete endeavour to answer a research question or a set of research questions (regardless of whether funding is assigned to it or not). This does not include activities aimed for services improvements/provisions, or stakeholder/user involvement activity feeding into research project designs, unless there is an intended academic gain such as publishing a paper and/or report or presenting findings on academic platforms such as conferences.”*
- “Conflicts of Interest” referenced further example from UK Research and Innovation’s (UKRI) webpage and policy on conflicts of interest and addition of *“It also includes situations where the researcher’s judgement or action could, or be perceived to, be impaired by a secondary interest such as when reviewing grant applications, publications or career progression (including interviews/examinations) and when acting as a co-supervisor or co-investigator with an individual where there is either a close or acrimonious relationship.”*
- “Export Controls” referencing the UK government pages provide useful information on Export controls applying to academic research”.
- “Human Tissue in Research” addition of Human Tissue Management Group and resources available within the University.
- “Equality, Diversity and Inclusion (EDI)” referencing the university’s EDI SharePoint pages and resources.

2.2.2. As noted in the 2021 annual statement; in July 2021, the University published a dedicated **Code of Practice for Research Ethics Committees (CoPREC)**⁵. Whilst the *Code of Research Conduct and Research Ethics* outlines the guiding principles for conducting research, the CoPREC outlines the minimum expectations for the operation of Research Ethics Review Committees and specific guidance on the operation of School, Department or Faculty Research Ethics Review Committees (RECs) and associated processes, including review criteria. It was designed to ensure alignment of process and governance but also allow discipline-appropriate procedures to be implemented where appropriate and ensures that RECs are always independent in forming their opinions.

CoPREC was scheduled to be reviewed the following year to reflect lessons learnt from its implementation and apply any potential updates. However, given the successful implementation we do not foresee any substantial changes. URIEC have reviewed CoPREC in 2022 and issued version 2 in September 2022 with a summary of the changes/updates.

The changes included.

- The removal of “for Research Projects involving Human Participants” from the title of the document to accommodate potential ethical issues implicating the researchers and those indirectly involved in the research.
- A new section was added; Section 1.1 “Remit of the Code” was added.
- A new paragraph added under section 4 “Triggering a REC Review” to clarify stakeholder and user involvement activities feeding into research project designs.
- under section 4.1. “Criteria for REC Review”
 - Point ‘a)’ was slightly revised to include participants, or others directly or indirectly involved in the research project.
 - Point ‘c)’ was revised to exclude activities that are already mitigated through Health and Safety processes.
 - Under “Glossary and List of Abbreviations” section; the definition of Research Project to make it clearer for the purpose of the code.
 - Lastly, many acronyms, where they are not used substantially throughout the code, were spelt out to help the flow of reading the code.

⁵<https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/University-Research-Integrity-and-Ethics-Committee-Research-Ethics-Committees.aspx>

- 2.2.3. The Quality Manual⁶** sets out the regulations, policies and procedures around teaching and learning at the University. The manual is updated on a regular basis and sets out information and guidance relating to academic misconduct⁷. Regular training is provided for academic misconduct officers in all schools and departments. The scope of the training does include research students. The Manual was updated in 2023⁸.
- 2.2.4. Research Ethics and Integrity SharePoint Pages⁹** (internal) were published in May 2020 to provide central support on all aspects of Research Ethics and Research Integrity. These pages are continually updated, including contact information for the research ethics committees and resources for researchers. Pre-recorded Video presentations are also being added to facilitate ease of access for researchers in their own time.
- 2.2.5. Research Integrity Week;** As part of the University's commitment to strengthen the integrity of research, URIEC, with the Head of Research Integrity, Risk and Compliance and the support of the Researcher Academy, Libraries, Digital Research, Research Operations and UKRIO, organised our Third Research Integrity Week from **19-23 June 2023**. The sessions were intended to highlight many research integrity aspects, including ethical and were open to staff and student at the University, including its international campuses. The sessions were recorded and subsequently published internally¹⁰ to all staff and students within the University and included Introduction to the Code of Research Conduct and Research Ethics, Introduction to Research Ethics at University; Good research practice and a healthy research culture (UKRIO); Trusted Research and Export Controls; Reproducibility in Academic Research; Introduction to Research Contracts - Tips and Advice; 'Open or closed? Finding the right balance with University Libraries and Digital Research'; Running the Publication Ethics Gauntlet (UKRIO); Research Post Award- Financial Management and Compliance; and What does it mean to be ethical and socially-just in 'decolonial' times? There were overall 990 registrations.
- 2.2.6. Clinical Research:** Research Projects involving the NHS, Social care, and Prisoners and Prison and Probation Service is supported centrally by the Research Governance team. The team ensures compliance with and gaining the Health Research Authority approval and compliance with UK Policy Framework for Health and Social Care Research and the Medicines and Healthcare products Regulatory Agency (MHRA) requirements and approvals needed for Clinical Trial of an Investigational Medicinal Product and medical devices. The team also provide a wealth of dedicated templates, Standard Operating Procedures, and guidance on regulatory requirements, best practices, Human Tissue Act and Administration of Radioactive Substances Advisory Committee. The team have dedicated internal pages¹¹ with information and resources in line with the HRA, MHRA and NIHR guidance and are kept up to date with relevant information and guidance.
- 2.2.7. Public Engagement:** The Institute for Policy and Engagement¹² has been created to help form partnerships and networks between the University's world-class research, and the people and organisations it can help. The Institute's mission is to support the exchange of knowledge and ideas to enrich policy making, inspire people, support communities, transform lives and shape the future. The commitment to public engagement features in the University's Strategy¹³ under '*embedding collaboration in all we' do* goal which commits us to "[...] *endeavour to become a university without borders, reaching out to our students, to our alumni and to our civic partners, industry, governments and citizens to ensure our research and education is developed in collaboration with our stakeholders and that we are recognised for the many benefits we provide to society.*" This commitment is asserted in our Knowledge Exchange and Civic and Regional

⁶ <https://www.nottingham.ac.uk/qualitymanual/quality-manual.aspx>

⁷ <https://www.nottingham.ac.uk/qualitymanual/assessment-awards-and-deg-classification/pol-academic-misconduct.aspx>

⁸ <https://www.nottingham.ac.uk/qualitymanual/recent-changes/changes-in-2023.aspx>

⁹ <https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/Code-of-conduct.aspx>

¹⁰ <https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity>

¹¹ <https://uniofnottm.sharepoint.com/sites/ResearchandInnovation/SitePages/Medical-Research-Governance.aspx>

¹² <https://www.nottingham.ac.uk/policy-and-engagement/home.aspx>

¹³ <https://www.nottingham.ac.uk/strategy/goals.aspx>

Strategic Delivery Plans that sit under the University Strategy. The principles of public engagement with research will be embedded in our Digital Nottingham initiative¹⁴.

- **Annual Policy Impact and Public Engagement Awards**¹⁵ were introduced by the Institute for Policy and Engagement in 2019 and have been run annually since. Our annual awards (Best policy impact initiative, best public engagement initiative, rising star award - policy impact, rising star award - public engagement, and Institute Director's award) aim to recognise the excellent work by researchers and academics on all campuses in achieving policy impact and engaging the public with current research.

2.2.8. Research Integrity and Ethics Champions: The University's Research Integrity and Research Ethics Committee working with the Pro-Vice Chancellor for Research Knowledge and Exchange and Faculties through the University's Research Committee have established two new roles within the University (Faculty Research Integrity Advisors, and School Research Integrity and Ethics Champions). These roles now support the promotion of Research Integrity and excellence in research across the faculties and schools and ensure awareness of ethical procedures and provide basic guidance to all researchers within the University. They also support the dissemination of relevant messages of excellence and integrity in research and provide advice on poor research practices where identified.

2.2.9. Trusted Research: The University published a dedicated resource, Trusted Research Toolkit¹⁶, to support and guide international research projects and initiatives to comply with the Centre for the Protection of National Infrastructure's¹⁷ Trusted Research requirements, which aim to secure the integrity of the system of international research collaboration, which is vital to the continued success of the UK's research and innovation sector. The Toolkit ensures the identification and management of potential risks to your Research/ Knowledge Exchange activities; helps researchers, UK universities and industry partners to have confidence in international collaboration and make informed decisions around those potential risks; and explains how to protect research and staff from potential theft, misuse or exploitation.

The Trusted Research team have substantially increased activities throughout the reporting period with monthly open sessions during term time with ongoing analysis of attendees by School, Faculty, and role (APM or Academic) and bespoke sessions for individual Schools and Research Groups. It has also identified high-risk research areas and provided Senior leaders' briefings.

2.2.10. Research Integrity Bytes¹⁸: are one-page notes addressing common issues and questions raised by researchers in all fields. The Bytes were introduced to give researchers a starting point when considering issues that may impact the integrity of their research. New bytes are published as and when identified. The latest bytes included *Services Improvements and-or Evaluation Research* and *Safeguarding in Research*

Just to give a flavour of areas covered: Health and Safety in Research - Incidental Findings in Research - Version Control in Research - Vulnerable People in Research - Authorship - Documenting and Depositing Research Data- DPA- Online and Social Media Research - Researcher Responsibilities- Recruitment Posters - DPA and Anonymisation - Prize Draws in Research- Children in Research- Consent and Assent- Data Protection UK - Children in Research-Considerations- Data Sharing- Fundamentals of Informed Consent - Steps of Informed Consent- Pre-prints vs Pre-proof-press- Questionable Research Practices- Research Involving Illegal Activities - Health Research Authority - Safeguarding in Research.

2.2.11. Animal Welfare and Ethical Review Body (AWERB): All experimental work involving vertebrate animals conducted by the University of Nottingham is considered by AWERB even if this work is below the threshold requiring regulation under the Animals (Scientific Procedures)

¹⁴ https://uniofnottm.sharepoint.com/sites/Digital_Nottingham <https://leadershipatnottingham.com/about-digital-nottingham>

¹⁵ <https://www.nottingham.ac.uk/policy-and-engagement/About-us/Awards/Awards.aspx>

¹⁶ <https://uniofnottm.sharepoint.com/sites/ResearchandInnovation/SitePages/Trusted-Research-Toolkit.aspx>

¹⁷ <https://www.cpni.gov.uk/trusted-research>

¹⁸ <https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/Research-Integrity-Bytes.aspx>

Act 1986 (ASPA). Research projects within the School of Veterinary Medicine and Science are reviewed by The Committee for Animal Research and Ethics (CARE). Projects received by CARE that fall under ASPA will be referred to AWERB.

2.2.12. UK Access and Benefit Sharing Regulations: The University of Nottingham is committed to compliance with the Nagoya Protocol¹⁹ on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity and the EU's Nagoya Protocol Implementation Regulation (Regulation (EU) No 511/2014). Guidance on the compliance with the Nagoya Protocol on Access to Genetic Resources has been updated to reflect the changes introduced post Brexit²⁰. We have also utilised Trusted Research Review process to capture and notify researchers of their obligations when projects are identified to potentially fall under the Nagoya Protocol remit. We have also updated our Checklist for researchers to help assess individual projects and keep a record of these assessments.

2.2.13. Social Media Research guidance²¹: The University Research Integrity and Ethics Committee have produced Social Media Research Guidance. This document highlights the potential ethical implications/risks for research when dealing with social media and/or Internet Mediated Research and the considerations when undertaking research involving these areas. There is a substantial overlap between these areas and careful considerations need to be taken to ensure Ethical and legal concerns are well mitigated to preserve the integrity of the research and its outcomes. The guidance document substantially draws information (in many cases; verbatim) from the British Psychological Society's Ethics guidelines for internet mediated research (IMR). The guidance was not intended to be exhaustive and should not be seen as a substitute for advice from suitably qualified persons.

2.3. Digital and Technology Services - Current systems and culture, and Changes and developments

2.3.1. The digital research team continues to update and refresh published guidance and materials to support researchers in managing their research data. The dedicated SharePoint pages²² (internal) includes resources covering planning, data storage, process and analysis, archiving.

2.3.2. Ongoing membership of, and contribution to, the Faculty of Social Sciences Research Ethics Committee with regular presentations and involvement aimed at staff.

2.3.3. Support for the Security Remediation Product Team has been extended, ensuring that IT security risks are anticipated, monitored and dealt with in a co-ordinated and timely manner.

2.3.4. Support for the Modernisation Delivery Team has been extended, ensuring that at-risk and legacy hardware, some of which may support research processes, is retired or ring-fenced to protect against failure or malicious activity.

2.3.5. Organisation and membership of the University's Research Data User Group, which champions FAIR²³ data across the organisation and is responsible for the University's Research Data Management Policy (aimed at staff and Post-Graduate Researchers (PGRs))

2.3.6. Training and awareness sessions around digital research and data management planning, for both staff and PGRs, including 'Digital Research and Libraries supporting Research Integrity' presentation as part of the University's Research Integrity week (aimed at staff and students)

¹⁹ <https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>

²⁰ <https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/Access-and-Benefits-Sharing.aspx>

²¹ <https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/Research-Integrity-Bytes.aspx#social-media-research>

²² <https://uniofnottm.sharepoint.com/sites/DigitalResearch/SitePages/Publish.aspx>

²³ <https://www.go-fair.org/fair-principles/>

2.4. Libraries - Current systems and culture, and Changes and developments

Libraries provide a range of systems, services, advice, and training to enable researchers to conduct and disseminate robust and credible research:

2.4.1. Research Data Management (RDM)

- Data management plan review: advise researchers on how to obtain and analyse data in a transparent, rigorous and ethical way. Advise on best practices in sharing data to ensure it is FAIR where possible, but secure when not.
- Research Data Management training: Bespoke sessions to schools/research groups (primarily staff and PGRs). Moodle course on introduction to RDM (primarily PGR and Post-Graduate Taught).

2.4.2. Support researchers in complying with copyright and funder obligations.

- Staff support researcher compliance with UKRI and Wellcome OA obligations e.g., open licences, acknowledgement of funders in manuscript.
- Webpages which give copyright advice.
- Training sessions on Copyright and Where to Publish (primarily PGR).

2.4.3. Support transparent sharing of research findings.

- Management of Research Information System (RIS) (publications) and Dspace (research data) repositories.
- Provide Digital Object Identifiers to ensure longevity of data underlying findings.

2.4.4. Increase understanding of Open Research at the University

- Maintain Open Research webpages.
- Promote and advise on open protocols for systematic review and more widely.
- Promote and advise on sharing of software as well as data.

2.4.5. Management of secure and sensitive data

- The Economic and Social Research Council SafePod located in the Hallward Library facilitates safe and secure access to sensitive external data sets at the University.
- Provide access to a 'dark' archive with the research data repository where sensitive data can be archived but not shared.
- Contribution to the institutional Research Integrity Week in June 2023 with the workshop 'Open or closed? Finding the right balance with University Libraries and Digital Research' co-delivered by Jane Grogan, Senior Research Librarian and Jasper Donelan, Digital Research Specialist.

2.4.6. Research intelligence

- Scoping and preparation for a new Research Intelligence service which will embed responsible research assessment principles within initiatives supporting increased research reputation and impact.
- Took part in the University's Research Integrity Week (20-24 June 2022) and delivered a session titled "Digital research and Libraries supporting Research Integrity".

2.5. The Researcher Academy - Current systems and culture, and Changes and developments

- 2.5.1.** The Researcher Academy (RA) is a provider of Research Integrity education and training and is responsible for both awareness raising with regards to professional conduct topics and the development of appropriate behaviours amongst postgraduate research students.

The Researcher Training and Development provision, which spans throughout all stages of the Researcher career, from Postgraduate Research Students to Early Career Researcher, Research Fellows, Postdoctoral Researcher to Academics and Senior Research Leaders, aims to instil and further develop the commitment to Research Integrity in our community. The Doctoral Training Programmes (Biotechnology and Biological Sciences Research Council

(BBSRC), Economic and Social Research Council, Natural Environment Research Council, Arts and Humanities Research Council) utilize the core Researcher Academy training in RI for their cohorts.

2.5.2. Research Culture Conference: Research Culture Conference has become an annual institution-wide event that the Researcher Academy organises, taking place in July every year following the first conference in July 2022.

In July 2022, the conference '[Building a Healthy, High-Performing Research Ecosystem](#)' had 257 attendees and in July 2023 the conference '[Reinventing Research Ecosystems](#)' had 124 colleagues attended. The conference programme encourages open dialogues across all areas of research to promote inclusive research cultures and environments and challenge poor research ecosystems.

Research Culture comprises the behaviours, values, expectations, attitudes, and norms of our research communities. It influences researchers' career paths and determines the way that research is conducted and communicated. At Nottingham, we want to build a healthy and ambitious Research Culture that aims to solve the biggest challenges humanity has ever faced while nurturing talent. Working together and sharing personal and collective responsibility ensures we create a diverse, inclusive, equitable, forward-looking, and high-performing research community.

2.5.3. The RA offers training in Research Integrity (RI) related topics both within the central programme of training and within a series of Faculty specific training programmes.

a. Within the central programme –

RI Comprehensive: The course has 6 core modules and 7 optional modules, where each module has an associated quiz at the end. Passing all 6 core modules qualify for a certificate. **219** participants enrolled during the reporting period.

RI Concise: This is a shorter version particularly useful as a refresher, open to all staff and students. **286** participants enrolled during the reporting period.

The following research integrity related courses were delivered through the RA central programme of training for researchers:

- Introduction to the Code of Research Conduct and Research Ethics (5 sessions)
- Introduction to the ethics review - for new ethics officers and panel members (4 sessions)
- Introduction to the Nagoya Protocol and Access and Benefit Sharing (4 sessions)
- Research Ethics for Doctoral Researchers (5 sessions)
- Introduction to Trusted Research and Export Controls (5 sessions)
- Identifying and Managing Intellectual Property issues in Research

A new programme for the 2022-23 academic year, **Thematic Programme for all researchers on Research Methods**, was developed and delivered. This programme includes two key workshops:

- What makes a study design robust?
- Facing research dilemmas: reflexivity; equality, diversity and inclusion; ethics; transparency

In total, **778** researchers have enrolled and completed the above training. An additional **205** researchers have enrolled but either not completed (partial training) or did not pass the chosen training module.

b. Faculty Programmes

The following courses were delivered within the faculty training programmes for the Faculties of Arts, Engineering and Medicine and Health Sciences:

- Patient, carers and public involvement in research
- Open Access for Researchers
- Good laboratory practice: fundamentals
- Good laboratory practice: techniques

- Good Clinical Practice training
- Exploring ethics in research Embedding the 3Rs in Research
- A question of ethics: the use of humans and animals in biomedical research
- Introduction to Responsible Research and Innovation

2.5.4. Working with the University of Nottingham Research Integrity and Research Ethics Committee, and the Head of Research Integrity, RA helped promote the Research Integrity Week from 19-23 June 2023.

2.5.5. The Researcher Academy also offers online courses developed by **Epigeum** (Sage Publishing).

2.5.6. The Researcher Academy, through its many activities, holds membership and collaborates with a few organisations that have got Researcher Integrity in the very core of their mission. Among them are:

- UKRI (and its Councils)
- Wellcome Trust
- Leverhulme Trust
- U21
- Vitae
- EUA Council for Doctoral Education (EUA-CDE)

2.6. Human Resources- Current systems and culture, and Changes and developments

2.6.1. The Organisational and People Development (OPD) team's core function is to develop and support individuals, leaders and their teams to bring their authentic selves to work, in a safe and supportive environment. All work done by OPD have a direct impact on the Research community.

2.6.2. Overall work for the period includes:

- **Open conversations** – a project has started to develop the University's capacity to have open conversations. In response to the University research culture survey, alongside the needs of our wider University community, we have identified a need to support all our staff to have open discussions, that are inclusive, and enable honesty without dissatisfaction or fear. This work has started in earnest through 2022/23 and will continue to be part of our established OPD offer for the years ahead.
- **Building Trust and Accountability** – work has started this year to work with Senior Leaders, including those who work in the Research Space, to develop their ability to build trust and accountability and to build a culture of positive intent and to be able to hold ourselves and others accountable.
- **Becoming a Learning Organisation** – a newly appointed Associate Director of Learning and Development has started the cultural shift towards becoming a learning culture and developing our conditions of learning. This encourages us to think about learning in the widest sense and grab opportunities when they arise.

2.6.3. An **Associate Director for Organisational Development (OD)** has been appointed and has established the University's first Organisational Development Team which shows the University's commitment to supporting the culture, including Research Culture. The Associate Director for OD also has a remit for Equality, Diversity and Inclusion and will be supporting all staff to be able to bring their authentic selves to work has been involved in the following activities:

- Culturally, there has been a move to an EDI themed governance structure and the combination of EDI Committee and People and HR Committee to form the People and Culture Committee. The EDI themed steering groups were established by the Pro-Vice-Chancellor for EDI and People in readiness for the start of the next academic session. This included inviting HR representatives to build collaboration and alignment across the department.

- Disability Recognition Month Central Event, 'What's New in the disability space'.
- Supporting Recognition months, such as International Women's Day and the LGBTQ+ events
- Mental Health Awareness Week photography exhibition and associated signposting/ sharing of resources around anxiety in particular – collaboration between HR and EDI.
- Reproductive and Gynaecological Health task and finish groups – overarching group led by Gender Theme Leads, but Menopause Task and Finish chaired by OD and Infertility Treatment/Miscarriage Task and Finish by OD staff.
- International women's day – OD developed a toolkit of resources to share with those attending the keynote event.
- Wellbeing newsletter – this is released quarterly and has strong readership.
- The University has voluntarily published our ethnicity pay gap data alongside gender pay gap reporting to help drive positive progress in inclusivity for a 3rd year, and we are committed to driving further improvements in this area.
- January 2023 – OD staff spoke at the Research and Innovation team Reset, Refresh and Re-engage event on wellbeing at University and the resources available to staff.

2.6.4. Within **Teaching and Learning activity** OPD promotes and celebrates the institutional culture of Scholarship of Teaching and Learning through evidence and values-based approach to professional development. Both Research-only and Research and Teaching communities engage with a diverse offer of workshops, conferences, programmes of learning, resources, and reward and recognition schemes, including Teaching and Learning Conference April 2023, Research Conference June 2023, Failure Festival (celebrating what we learn when things don't go so well), Lord Dearing awards, and Nottingham Recognition Scheme awards.

2.6.5. In relation to **leadership and management skills**, a focus has been to increase the number of staff from the research job family that are engaging with and accessing our offer. In real terms this has led to an increase of 32% of staff from a research background accessing the learning from 21/22 and 22/23.

2.7. Faculties - Current systems and culture, and Changes and developments

In line with the CoPREC, each faculty has a Faculty Research Ethics Committee whereby the School Research Ethics Committees and/or Research Ethics Officers with the responsibility for research ethics, raising awareness of and providing training on research integrity and ethics, writing annual monitoring reports for Research Ethics Committees, and keeping their Schools informed about the University's policies on research integrity and ethics.

Below is a selection of the activities reported by the faculties within the University.

2.7.1. Undergraduate, Taught and Research Students:

- School of Health Sciences:** The School provides two co-leads for research integrity and ethics – Dr Nicola Wright and Dr Katharine Whittingham. These roles support staff and students to apply for both University and NHS ethical approval. They provide guidance to individuals throughout all stages of their research projects. This takes the format of both formal timetabled sessions (for students across Under-Graduate and Post-Graduate provision) and individual support as required. The formal taught sessions cover topics such as ethical principles and dilemmas in research and research governance process. The content is tailored depending on the learner's level. A yearly Research Community of Practice session (open to all staff and post-graduate students) is also held, focussing on issues relating to research integrity and ethics. The school accesses the Researcher Academy and central Professional Development services to regularly support staff/student attendance at relevant training.

The school operates a research mentoring scheme both formal and informal. For all awarded research projects and the Principal Investigator is required to undertake and

complete a Risk Assessment form which is kept on a central file. The School's Research Integrity and Ethics Leads are the first point of contact for staff and students on matters relating to all aspects of research design and implementation which have a bearing on the ethical conduct of their research. This includes advice regarding navigating the complex processes of obtaining Health Research Authority (HRA) and NHS Trust approvals for projects. Guidelines and document sets are provided to support these.

- b. School of Life Sciences:** All SoLS Postgraduate students maintain a training portfolio (logged on PGR-Web) where Ethics and Research Integrity is one of key compulsory training objectives. The Research Integrity Course consist of the following topics: Research Integrity and Trusted Research, Research Methodology, Professional, Research Environment, Research Outputs and Doctoral Milestones. Additional programme details are available on the Research Academy Training Hub. Students are also highly encouraged to engage with training across all 4 UKRI domains- Knowledge, Personal Effectiveness, Research Governance, and Engagement. Research Integrity course is also compulsory for all DTP students. Professor Andrew Bennet provided training to 1st and 2nd year BBSRC DTP students on Experimental Design, which contains details on Research Ethics and Integrity.

For the past year Faculty Research Integrity Advisor and SoLS Research Integrity and Ethics Champion respectively, have been working closely with SoLS PGR Directors on upgrading the PGR training portfolio, suggesting adding 4 Research Integrity Workshops per annum. The workshops would include the following themes:

- Experimental Design- randomisation, data set size, pseudo replication, blinding and double blinding, age, sex and consideration of the statistics.
- Data Provenance- paper trail from final figure or tabular data back to the original raw results.
- Dealing with Images: PCR and Western blots.
- Plagiarism- avoiding plagiarism, use of plagiarism detection software, collusion versus collaboration.

Statistics- P-value hacking: Each session will consist of an informal discussion about a particular theme where students would chat in a relaxed atmosphere about personal experience. Afterwards, time will be set aside for a private one-to-one consultation, confidentially and independently of their Principal Investigator.

- c. School of Veterinary Medicine and Science:** PGR student activities include: (a) Responsible conduct of research and research integrity introduced as part of the induction process and student handbook. (b) Promotion (via email, staff meetings) of the Research Integrity online course, the University's Research Integrity week and the School's Research Integrity workshop. (c) Research integrity reinforced as part of regular supervision meetings and annual reviews. (d) Implementation of statistical analysis training.
- d. School of Economics:** UG and PGT Student Handbooks include information on academic misconduct. Dissertation-linked module for UG students discusses plagiarism and other types of academic misconduct relevant to UG dissertation. Dissertation linked module for PGT students gives information on academic misconduct and all PGT students complete an academic integrity statement before submitting dissertation. Talk to MRes and PhD students given by Professor Martin Sefton and Professor Oliver Morrison 2/11/23.
- e. School of Education:** In the School we have clarified the recommended and required levels of training for staff according to levels of responsibility as follows: SoE Ethics training run by Core ethics panel team (part of PGR Taught programme x2 workshops); Research Integrity (on-line Module); Research ethics for Doctoral Researchers (on-line module, 27th July, places booked in advance); SoE DMP training.
- f. Nottingham University Business School (NUBS):** Student briefing sessions on research ethics and integrity are given to PGT students. PGT students, who mostly use the delegated

process (pre-approved protocols), must discuss research ethics and integrity with their Dissertation Supervisor and confirm this discussion has taken place as part of the Dissertation Proposal submission prior to any data collection. When submitting their Dissertation, they must provide a statement confirming that they have conducted their research according to the University research ethics and integrity guidelines and principles. Particular attention is paid to those very rare occasions when PGT students wish to carry out projects that fall outside of the pre-approved research protocols (0 instances in 2022-2023). In those cases, students are required to follow the standard research ethics review (the same used for staff and PGR students). Since 2019-2020 NUBS has required PGR students to have their Ethics Checklist signed by their supervisors to enhance opportunities for a fuller appreciation and discussion of research ethics and integrity matters as well as to improve the quality of their research ethics opinion application prior to submission to the Research Ethics and Integrity Officer initially and to the REC subsequently. The Research Ethics and Integrity Officer provides feedback and advice to students when requested or if necessary. Further details on the communication of research ethics and integrity requirements (incl. GDPR) are available on Moodle and in student handbooks. PGR students are encouraged to attend Research Integrity Week and other events/workshops/trainings at the university related to research ethics and integrity.

- g. School of Law:** Research integrity and ethics are addressed in the bespoke, term-long Research Methods in Law module which is compulsory for all new PGR students and delivered in house by published experts in research methodology (assisted by Prof. van der Eijk (Methods and Data Institute) and Senior Research Librarian Tony Simmonds). Supervision sessions also include guidance on research integrity as appropriate. The School of Law PGR SharePoint page a section dedicated to research integrity and ethics with all relevant information and links to resources. At UG and PGT level, research integrity and ethics can play an important role, particularly in the dissertation module. Dissertation supervisors will guide students to the relevant resources and ensure that ethics approval is secured where needed. Although this comprehension approach is essentially pro forma for virtually all students (i.e., library-based) research below PGR level, engagement with the process teaches good research habits for those who progress to higher degrees and emphasizes the centrality of ethical (and methodological) rectitude in research for the benefit of all students. Information and advice on plagiarism and how to avoid it, are prominently included in the UG and PGT handbooks and Moodle pages. Dedicated sessions are offered as part of the School's Legal Skills training programme.
- h. School of Geography:** The School continues to support its students in understanding the application of research integrity. PGR students are informed of relevant training courses when available. Issues of research integrity are addressed in key documents such as Dissertation Handbooks and lecture presentations for UG and PGT students. PGR students receive training in research ethics as part of their training programme with a standing question of PGR advisory meeting forms relating to this.
- i. School of Politics:** Explicit information is provided in Student Handbook, as well as dedicated presentations to UGs, PGTs and PGRs as part of their dissertation modules and at their induction period.
- j. School of Sociology and Social Policy:** provides annual induction training in research ethics and the ethical review and Research Ethics and Integrity Committee (REIC) process at the beginning of the academic year to all relevant School students (UG, PGT, PGR) incl. third-year undergraduates commencing work on their dissertations; ethics masterclass (and new workshop) to UG students working on their final-year dissertations is delivered; PGT supervisors are invited to attend the PGT REIC overview session. PGR students meet weekly for a series of seminars organized by the School's Postgraduate Research Director and one of these sessions is run by the School's REIC, who presents the research ethics and governance procedures with doctoral candidates. Ethics also forms a separate item in the upgrade/confirmation of PhD status procedures, requiring students to discuss all ethical issues relevant to their work with the supervisors prior to their meeting with the upgrade panel and to discuss those issues in their upgrade document. A new starter PGR event is

scheduled circa October annually. A member of the PGR community sits on the SSP REIC, bringing in the PGR counsel to the work of the REIC. Two PGR Representatives attend the REIC Committee meetings and help set the priorities as a committee. For example, in 2022/23 our PGR representatives highlighted the increasing importance of emotion, secondary trauma and vicarious harm through the research process.

- k. School of Biosciences:** PGR Training: A new work package (WP) on Research Ethics (RE) and Research Integrity (RI) has been developed for the BBSRC DTP Programme. The content of this has been delivered from 2020-2023, however for the academic year 2022-23 this has been delivered as a 20 credit Level 4 Module – BIOS4158 - Research Ethics and Integrity. An experimental design module has been developed for Biosciences postgraduate students by Prof Murray Lark for PGR and PGTs, this 10-credit module ran for the first time in 2021/22.
- l. School of Chemistry:** The School of Chemistry is committed to promoting and facilitating the conduct of research and teaching activities with the highest degree of ethics and integrity. Staff and students are encouraged and trained to consider risks and responsibilities in chemical and biological research. Occasionally, UG and PG students might produce research proposals of their own and, in such cases, they should seek Ethics approval under the guidance of their supervisors. Ethical approvals were granted on five student surveys carried out within the wider student community in the School of Chemistry.
- m. School of Computer Sciences:** Research Ethics review process has been updated for projects involving minimal risk, and activities that pose a risk of harm to the researchers or the environment, reputational damage to the institution or a security breach risk. New forms are prepared for MSc student projects and disseminated (June 2023). Staff are informed of new requirements for all research (and ethics applications, including School-specific guidance and templates) and self-auditing of the research projects. Staff and PGRs are informed about University's Trusted Research requirements and monthly Teams sessions to support researchers. PGT students are introduced to Research Integrity during their Research Methods module. The Horizon Centre for Doctoral Training includes a compulsory module on responsible innovation for new PhD students.
- n. School of Pharmacy:** The School has incorporated a session on research ethics in our annual school staff meetings. The focus of this session is on explaining what research activities will require ethics approval and the procedure of applying for an approval in the school. New postgraduate students received a lecture on research integrity in their induction programme. Undergraduates on our MPharm degree are introduced to the Standards for Pharmacy Professionals, and Fitness to Practice (FtP) procedures, in their first few weeks on the course. FtP training includes Case Studies that include issues of research integrity.
- o. School of Physics and Astronomy:** Research ethics is flagged on the monthly reports submitted by PhD students, providing them an opportunity to note any problems. PhD students are given mandatory training in this area. Since 2020 we have offered the (excellent) online training from the graduate school. Fourth year undergraduate modules offered on Science in Society, which tends to spark discussions in the whole staff and student body. The Champion of Research Integrity and Ethics attends the Research Operations Group in Physics (one meeting every six weeks) to report and discuss actions and activities that have been undertaken to support and strengthen understanding and the application of research integrity.
- p. School of Psychology:** PhD research programmes are supported by the training in research ethics provided by the Researcher Academy (delivered via different taught modules). BPS²⁴ Codes and Guidelines set the standards for psychology as a discipline, and we also adhere to the requirements of the research councils.
- q. Faculty of Engineering:** A seminar has taken place in the relevant period as part of the E3R programme which covered the research ethics process in the faculty and an overview of

²⁴ <https://www.bps.org.uk/guidelines-and-documents>

research integrity. This was aimed at PhD students and staff and were well-attended. On-line training is available in addition to this. Research integrity is included as part of relevant undergraduate courses – Undergraduate Engineering courses are accredited by the relevant professional bodies and as part of this accreditation standards are met which include teaching on Research Integrity and Ethics for students. PhD students are required to complete the on-line module on research integrity offered by the Research Academy. The Engineering Research Handbook incorporates Research Ethics and Integrity which is kept up to date with the latest University information and guidance for academic and research staff.

2.7.2. Research and Teaching (RandT) Staff:

All research-active staff in faculties are included in a range of systems which ensure that researchers abide by the appropriate standards of honesty, rigour and transparency.

School Ethics Officers: The School Ethics officers keep their School up to date (via the School Research Committee, dedicated workshops, and emails to all staff) about university wide and faculty specific policies on research ethics.

The Research Ethics Officers have provided a series of teaching sessions (including lectures, seminars workshops and one-to-one drop-in sessions) for all staff. These sessions included consideration of ethical principles and dilemmas in research as well as information about research governance.

- a. **School of Biosciences:** Research Integrity (RI) is discussed in parallel with and connected to Research Ethics and Research Ethics Review (part of Ethics in Science) within the teaching and training activities of the school. Research Integrity in the School focuses on excellence in scientific practice (e.g. observing high standards, compliance, honesty as a researcher, etc.), bad practice (e.g. misconduct in terms of Falsification, Fabrication, and Plagiarism), secretive working, self-interest, etc.), questionable research practice and institutional responses supporting good practice (e.g. Training, codes of conduct, UK Concordat implementation, mentoring, positive research culture etc.), questionable and dealing with the bad (e.g. procedures for investigating misconduct, whistle blowing, publishers approaches, etc.).

A further 20 credit module that focuses on researchers' responsibilities to engage publics and support inclusive innovation has been developed and it will be delivered in 2023/24 (Introduction to Public Engagement and Communication in Science (BIOS4173)).

- b. **School of Chemistry:** Information on the 'Introduction to the Nagoya Protocol and Access and Benefit Sharing (ABS) Webinars' with information and web links for students and staff to book online sessions via the Research Academy pages was sent on the 22nd March 2022 to all students and staff within the School of Chemistry who would like to learn more about compliance with the Nagoya Protocol. A web link was also provided to all to watch a relevant short (10 mins) video presentation. There are no difficult ethical issues associated with the general activities within the School of Chemistry. Information on the security in international collaboration and ensuring our research and knowledge exchange activities are fully protected, was communicated to all in the School of Chemistry. Ethical approvals were granted on 5 student surveys carried out within the wider student community in the School of Chemistry.
- c. **School of Psychology:** The Psychology Research Ethics Committee Chair deals with complaints or concerns raised around research studies conducted with human participants. Inductions for new academic staff signpost SharePoint resources to support data management, open science and data sharing, information on research ethics and GDPR, with additional guidance for online studies. The school have a specific section on Research Ethics and Integrity (with useful links) as part of the online Research Induction Staff conducting In Vivo studies in the Bio-Support Unit aim to Reduce, Refine and Replace (3Rs) the use of animals as far as possible and their published results conform to the ARRIVE Guidelines. We have been supported in the application of the 3Rs by our National Centre for

the Replacement, Refinement & Reduction of Animals in Research (NC3Rs) programme manager, Emma Stringer. The NC3Rs programme manager also provides advice at the earliest stages of project planning. To support ongoing projects, annual workshops are held to promote best practice across the Midlands universities (Birmingham, Leicester and Nottingham). Thus, the 3Rs are an integral part of our high standards for laboratory animal work and the associated reporting framework.

- d. **School of Computer Sciences:** Research Ethics review process has been updated for projects involving minimal risk, and activities that pose a risk of harm to the researchers or the environment, reputational damage to the institution or a security breach risk. Staff are informed new requirements for all research (and ethics applications, including School-specific guidance and templates) and self-auditing of the research projects.

Horizon Digital Economy Research and the Trustworthy Autonomous Systems Hub projects have mandatory sections for Responsible Research and Innovation (RRI) plans on their internal project proposal proformas, which are considered in the project review process. Specific activities have also been introduced to scaffold consideration of RRI during proposal development (e.g., in proposal development sandpits).

- e. **School of Mathematical Sciences:** The School's SharePoint summarizes actions taken by the University, the core elements of Research Integrity, School contacts, and available training for staff and students. A reminder is sent on an annual basis by email and during the first School Staff Meeting of each academic year and annual reminders via periodic newsletter.
- f. **School of Pharmacy:** The school has incorporated a session on research ethics in our annual school staff meetings. The focus of this session is on explaining what research activities will require ethics approval and the procedure of applying for an approval in the school.
- g. **Faculty of Engineering:** Guidance on the appropriate inclusion of Technical and other staff on Outputs has been developed as part of the Faculty Outputs strategy review. This will be distributed in Autumn 2023. The changes to the UKRI submission system have led to a review of guidance for inclusion of Ethics and RRI in funding applications. This will continue to be developed in line with development of the new system and submission requirements.
- h. **School of Medicine:** The School of Medicine promoted the University of Nottingham Research Integrity Week (w/c 19th June) in the School Weekly Newsletter to all staff. The school has also launched its internal Research and Knowledge Exchange SharePoint, which is available to all staff, and which includes on its homepage a section on Research Governance and Integrity. The Research Governance and Integrity section includes links to university clinical research governance policies and the University's Research Ethics and Integrity SharePoint site.
- i. **School of Life Sciences:** Viktorija Asmolovaite, Research Development Officer, has refreshed the Research Integrity, Ethics and Culture pages on the Life Sciences research grants SharePoint site which were originally created by Dr Vincent Wilson and Dr Liz Humphreys in 2020. The pages intend to prompt all research staff and postgraduate students involved in research to think about Research Integrity within the sphere of publicly funded research in the UK, EU and US, and highlights the role of UK Research Integrity Office and provides case studies on high profile misconduct, ethics and integrity issues linked to Covid-19 research, whistleblowers and a link to Retraction Watch. Most recent updates on the page include two case studies of fraud and research misconduct.

Viktorija Asmolovaite promoted attendance at the University Research Integrity week. Dr Paul Smith, SoLS Research Integrity and Ethics Champion, attended various seminars during the Research Integrity Week (w/c 19th June 2023). Dr Paul Smith has attended the Good Research Practice and a Healthy Research Culture (UKRIO) session. As a result, Paul decided to provide mailshots on a bimonthly timing on signposting and webinars.

RI Training for in vivo research: Those carrying out human in vivo studies in Physiology and Nutrition Research area with SoLS Senior Research Fellow Dr Liz Simpson, including students, undertake Good Clinical Practice (GCP) training, completion of the online RI training and reading the University Code of Research Conduct and Research Ethics, mandated by the Faculty of Medicine and Health Sciences Research Ethics Committee (FMHS REC). Those conducting research in vivo with animals are encouraged to complete the Responsive, Rigorous and Reproducible Research Training by Responsible Research in Practice.

- j. School of Veterinary Medicine and Science:** The School's induction of all new academic and research staff includes discussion of the responsible conduct of research, including ethical review, research integrity and the University Code of Research Conduct and Research Ethics. Research integrity is reinforced as part of the annual ADC process of academic and research staff. Promotion of the University's Annual Research Integrity Week events and the University's Research Culture conference is undertaken via email to all staff and research students. Dr Sarah Knaggs (Senior Research and Business Development Manager) attended the Wellcome Trust's Reproducibility, Replicability and Trust in Science conference (7-9 Sept 2022), and subsequently hosted a high-profile speaker Alex Freeman, Executive Director of the University of Cambridge's Winton Centre for Risk and Evidence Communication, to deliver an online session to the School and University on 28 Oct 2022 on 'Demonstrating Trustworthiness in Science. Dr Sarah Knaggs and Prof Richard Lea led an interactive online Research Integrity workshop on 1 Feb 2023, open to academic, research staff and postgraduate students. Professor Richard Lea regularly discusses ethical reporting processes across the university with AWERB (Animal Welfare and Ethical Review Body). AWERB receives the same 2 annual reports as the University Research Integrity and Ethics Committee.
- k. School of Health Sciences:** The School has an established peer review system for research grant applications; a lone worker protocol; guidance on the responsibility of Principal Investigators including payment to research participants; guidance on good practice in research; a risk assessment protocol and advice (including updated COVID-19 risk assessment for students collecting data in the UK and International students' home countries). The school operates a research mentoring scheme both formal and informal. Staff also have access to support within their Research Groups.

The School's Research Integrity and Ethics Officer and Champion are the first point of contact for staff and students on matters relating to all aspects of research design and implementation which have a bearing on the ethical conduct of their research. This includes advice regarding navigating the complex processes of obtaining HRA and NHS Trust approvals for projects. Guidelines and document sets are provided to support these. The University of Nottingham's Code of Research Conduct and Research Ethics is made available to all staff who are encouraged to access online resources and to attend the Research Integrity Workshops organized by the University throughout the year.

- l. Faculty of Arts:** There were recent improvements to the way ethics approvals work for modules – we have been encouraging convenors from across the faculty to submit Delegated Assessment applications for all modules where data collection is required or likely to occur. There are currently 26 modules with Delegated Assessment in place – nine in English, 13 in CLAS, and four in Humanities. Research integrity was previously integrated with the research ethics SharePoint on the Faculty of Arts site. This has been maintained and updated throughout the year and highlights any current training that is available – currently a selection of recordings, documents, and centralized courses. In the Arts Ethics application forms, a section has been added for applicants to indicate ethics / integrity training they have completed. Added further direct hyperlinks have been added to the available training options. Research Integrity Week was promoted to all staff in the faculty via emails by the Research Integrity Champion and the other School ethics officers. This was also highlighted at the relevant staff meetings and newsletters. More generally, termly emails were sent out to all staff promoting key ethics and RI requirements, links to useful resources, current documentation, etc., highlighting any recent changes.

For providing guidance to convenors on application processes and the responsibilities of module staff and students, Professor Dominic Thompson produced two in-depth guides: one on ethics applications and RI considerations; and one specifically on Delegated Assessment. These were shared within English and have been useful for applicants. The Delegated Assessment guide has resulted in well-considered submissions. We (the school ethics officers) will look over these guides ahead of the new academic year and adapt them as needed so that they are applicable to the whole Faculty.

Discussions with ethics officers and academic staff have indicated that ethics and integrity surrounding online data is a particular point of current concern. Some specific guidance on this has been provided, but as a rapidly evolving area, the guidance requires more frequent review and update.

- m. School of Education:** the school have clarified the recommended and required levels of training for staff according to levels of responsibility as follows: Ethics General Induction required run by Ethics Chair (within four months); Data Management Plans training (within 6 months).
- n. School of Geography:** The School continues to support its staff and students in understanding the application of research integrity. Staff are informed of relevant training courses when available. For example, reminders on the need for ethical review have been integrated into correspondence on internal funding opportunities.
- o. School of Law:** Every Early Career Researcher (ECR) and new members of staff are assigned a mentor with compatible research interests. The mentor assists with the planning and conduct of research and publications, including advising on issues of research integrity and ethics. The School's Research Development Panel (RDP) monitors research plans for all staff, providing advice and constructive feedback. All research-active staff have annual meetings with RDP members to discuss their research plans for the next five years. Similar discussions are integral to the annual Appraisal and Development Conversations. All of these include considerations of research integrity and ethics. The School's Research Excellence Framework (REF) Team and output reviewers peer review all publications in preparation for REF, for ranking and rating purposes. Similarly, research funding applications are peer reviewed by two colleagues. Adherence to Concordat standards is monitored for both publications and funding applications. The School's Research Integrity and Ethics Champion provides regular school updates on matters of integrity and organizes ad hoc training or information sessions.
- p. Nottingham University Business School:** From 2021-2022 the NUBS research ethics review has required the applicant to have undertaken the university concise research ethics and integrity course and to confirm having done so as part of a REC application. There is regular review of the information on research ethics and integrity requirements and procedures for NUBS staff for both their own research and for their activity as PGR/PGT Dissertation supervisor. Links to relevant documents and online training courses have been provided on the NUBS Staff Information SharePoint and other places. Staff are encouraged to attend Research Integrity Week and other events/workshops/trainings at the university related to research ethics and integrity. Several staff have attended one or more of these events and/or engaged with recorded content.
- q. School of Politics:** Members of REC received training using the materials available at the University's Ethics and Integrity pages. Additionally, new relevant developments (such as updates of the University's ethics and integrity policies, etc.) are introduced and discussed at regular meetings of REC. For other members of staff, reinforcement of awareness of ethics issues and procedures at school meetings, and occasionally via email message to all staff. Additionally, information on the School's SharePoint site.
- r. School of Sociology and Social Policy:** The REIC meets several times per year to discuss issues and update policies; the REIC updates its policies and practice throughout the academic year and reports into URIEC; The REIC responds to URIEC comments/requests; Dr Thomas Guiney as chair of REIC, liaises with the Chair of URIEC and Head of Research

Integrity, Risk and Compliance. Dr Guiney is a member of the faculty level Research Ethics and Integrity Committee (FREIC) chaired by Dr Mel Jordan. We comply with the new CoPREC annual audit – We sampled 10% whereby there were no adverse findings, and one minor deviation about the collection of participant information sheet, and one question about the informed consent, which was discussed and resolved. The school maintains an ethics website; regular email updates; items on ethics in School meetings and in meetings of the Research Committee. The REIC itself also meets several times a year. Staff and PGRs are required to attend the RI concise training course, for example via our ethics website. The school's ethics website provides guidance and links to ethical review processes and is continually updated. The REIC works closely with the URIEC.

A new automated system was introduced this year, formally implemented on Oct/Nov 2022, to capture and process REC applications. The system works well within the REIC team, it is constantly being reviewed and tweaked, however this remains a single point of failure.

The school have also included references to the Trusted Research Process, securing FEO from an external REIC and we have included a new Checklist and Declaration section in the application forms, for researcher completion.

2.7.3. University of Nottingham Malaysia

The University of Nottingham Malaysia (UNM) have established a new campus-wide committee to coordinate research integrity and research ethics activities at the Malaysia campus. This committee modelled on the UK campus's URIEC. It oversees research integrity and research ethics activities of the Faculty of Science and Engineering (FOSE) and Faculty of Arts and Social Sciences (FASS), and report to UNM's Research and Knowledge Exchange (RKE) Committee and the UK's URIEC. The chair is Dr Steve Stewart-Williams from the School of Psychology who is also a member of UK's URIEC.

- a. Faculty of Arts and Social Sciences (FASS) Research Ethics Committee (REC):** All Directors of Research and/or School Research Ethics Officers have been requested to advise their colleagues and PGR students in their school to self-enrol on the FASS REC Moodle page. This page contains relevant guidance and information on research ethics, i.e., the University's Code of Research Conduct and Research Ethics, application forms and procedure, and online training on research ethics that can be accessed freely. Supervisors are expected to ensure that their PGR students gain ethical clearance from FASS REC, if needed, before collecting their data.

Staff Activities

- i. Ensure the faculty and school research ethics processes are clearly communicated to staff by:
 - Encouraging existing staff to self-enrol on the FASS REC Moodle page.
 - Enrolling all new staff automatically on the FASS REC Moodle page
 - Including relevant information on FASS REC and ethics processes in the school's research handbook
 - Placing the School's research ethics protocol and forms on SharePoint and/or the School's Teaching and Learning Moodle page
- ii. Incorporate research ethics and integrity into the induction for new staff (e.g., build in a one-to-one session with the School Research Ethics Officer, provide relevant information in a handbook, etc.)
- iii. Email reminders to staff (at the start of each academic year) to include the school's research ethics guidance and forms in their module Moodle pages as well as advice on ethical review in their module handbooks.
- iv. Email reminders to staff to use the latest application forms and templates provided via the FASS REC Moodle page.
- v. Encourage staff to self-enroll on the 'Research Integrity: Comprehensive' Moodle course and to engage with the online training provided in the page)
- vi. Remind staff of the research ethics process whenever applications for research grants are made.

Student Activities

- i. Incorporate research ethics and integrity into the induction for new PG students (e.g., highlight research ethics training conducted by the Graduate School (GS))
- ii. Email reminders to PGR students to use the latest application forms and templates provided via the FASS REC Moodle page.
- iii. Encourage PGR students to self-enroll on the 'Research Integrity (Social Sciences)' Moodle course.
- iv. Request PhD to attend research ethics workshops/training by the GS, especially if they are conducting interviews or surveys with human participants.
- v. Conduct annual workshops on ethics policies for PG students by individual School and GS.
- vi. Include general information about ethics and the relevant forms that students must complete in programme handbooks, programme Moodle pages, module handbooks and/or Moodle pages for modules.
- vii. Offer a research methods module to PGT students as part of their MA programme.
- viii. Build in ethics considerations/training into taught modules that have research element.
- ix. Incorporate an ethics/proposal stage into taught modules that have a research element to ensure ethical clearance is gained prior to any data collection.
- x. Conduct a briefing session/training on research ethics and the ethics review process for each run of modules with research elements (e.g., dissertation modules).
- xi. Email reminders to students about the ethical review around the time they are completing their dissertation research proposals.
- xii. Ethics briefing for UG/PGT students at the early commencement of PSGA3001 (Research in Applied Psychology) and PGSA4001 (Applied Research Projects)
- xiii. NUBS conducted a briefing on research ethics for MSc and MBA programs upon enrolment of the new cohort.

b. Faculty of Science and Engineering Research Ethics Committee:

- i. Ethics Workshops for New Graduate Students and New Staff Members: With each new intake of graduate students (twice per year), the Graduate School puts on an ethics workshop run by the Chair of RIREC. The workshop explicitly deals with a range of research-integrity issues.
- ii. Individual Schools/Departments run separate sessions on research ethics and research integrity as well. These sessions are delivered at the beginning of the Final Year Project modules.
- iii. Researchers (both staff and student) of the Faculty of Science and Engineering are encouraged to view and access the 'Science and Engineering Research Ethics Committee' Moodle page. It explains the processes that need to be followed for submitting applications for ethical approval, procedures related to allegations of misconduct, standard templates of official forms, codes of conduct, and links to further information.

2.7.4. University of Nottingham Ningbo China

During 2022-23 academic year, several in-person training and compulsory courses were organized for both students and staff.

a. Staff Activities

- i. Introduction of research ethics to new staff, September 2022
- ii. IP Protection and Commercialization Training, September 2022
- iii. Mentoring PhD Students: Some Reflections, organized by Graduate School for PhD supervisors, January 2023
- iv. Workshop on Research Ethics and Integrity, May 2023
- v. Conducted bi-annual presentations and Questions and Answers during induction weeks for staff at the start autumn and spring semesters.
- vi. Informal 'research ethics office hours conducted by the department's research officer.

b. Student Activities

- i. Research Ethics training for PhD students, August 2022
- ii. Introduction of research ethics to new intakes of Ph.D. students, September 2022
- iii. Introduction of research ethics to UG students for dissertation, October 2022 Research ethics and integrity training to PhD students as their Research Design class, October 2022
- iv. Research ethics and integrity training to PhD students as their Research Design class, February 2023
- v. Introduction of research ethics to new intakes of PhD students, February 2023
- vi. Introduction of research ethics to PGT students for dissertations, February 2023
- vii. Ethics and Integrity in PhD Dissertation Examination, organized by Graduate School for PhD supervisors, April 2023

2.8. Research Relating to Research Integrity

2.8.1. Faculty of Science:

- a) **School of Biosciences:** The School of Biosciences and the School of Veterinary Medicine and Science host the Centre for Applied Bioethics (CAB). This research group comprises of academic staff from across the University, honorary professors and lecturers, research fellows and PhD students. These researchers conduct research in the field of applied bioethics focused on animal, agri-food and environmental management issues, and participatory ethics. Some of the current work is funded by EC H2020, The Bill and Melinda Gates Foundation, The Wellcome Trust, DFID/Royal Society, BBSRC, EPSRC, etc.

Projects being conducted within CAB are examining themes of (i) Ethics of Animal Use in Experimentation; (ii) Development of tools and frameworks for ethical assessment, (iii) the relationship between Responsible Research and Innovation (RRI) and Research Ethics, (vi) development of Ethical Tools to support decision-making in (animal) REC processes, (v) openness and transparency in bioscience research; (vi) Approaches to research ethics training for biosciences researchers.

Other academics in the school who have a social science training are also interested in research ethics questions related to their research topics (e.g., within the Division of Agriculture and Environmental Sciences, Division of Nutritional Sciences). A new tool University of Nottingham ethics tool, 'Ethics in Research' Cards has been produced by Prof Millar working with Dr Peter Craigon and Professor Richard Hyde. These 130 cards will be made available to all first year DTP students to support their ethics training this coming year 2023/24.

- b) **School of Computer Science:** The School of Computer Science is a core member of the UKRI Responsible AI UK grant (<https://www.rai.ac.uk/>). This grant forms an open, multidisciplinary network bringing together researchers from across the UK, drawing on a wide range of academic disciplines to understand how we should shape the development of AI to benefit people, communities and society.

There are two current (linked) research projects on Responsible Research and Innovation (RRI), under the umbrella of the Horizon Digital Economy Research Institute and the UKRI TAS Hub, focusing on RRI, on various topics such as digital forensics; investigating the use of automated systems for electoral regulations and benefiting management bodies; resilient, sustainable and efficient use of digital energy. All projects look specifically at responsible research and innovation with trusted data-driven products and trustworthy autonomous systems. This is also supporting ongoing work developing card-based tools to facilitate reflection on technology system ethics (and legal and social issues) as well as RRI.

Horizon and the TAS Hub both promote research integrity as a guiding principle. As noted above, all projects are specifically required to address RRI and EDI issues from their early stages.

2.8.2. Faculty of Medicine and Health Science

a) **School of Medicine:** Publications from School of Medicine (authors highlighted in bold and underlined) related to research ethics or governance in the past year are as follows:

- *Concerns about the reliability of a trial of oral progesterone for preterm birth included in a meta-analysis.* Published: May 29, 2022. Author/s: Benjamin Y. Gravesteyn, PhD; Jim G. Thornton, PhD; Emmanouil Katsanevakis; PhD Ben Willem Mol, PhD. Journal: American Journal of Obstetrics 5, 4, Sept 2022.
- *Letter to the Editor,* Maged et al. Am J Perinatol. 2020 Apr;37(5):491–49. Published 06 May 2022 37(5):491–49. Author/s: Jim Thornton, Zarko Alfirevic, Vincenzo Berghella, Wessel Ganzevoort, Louise Kenny, Ben Mol, Francis Muriithi, Dwight Rouse, Andrew Shennan, Annika Strandell, Joris A.M. van der Post, Madelon van Wely. Journal: American Journal of Perinatology 2022 May 6.
- *Checklist to assess Trustworthiness in RAndomised Controlled Trials (TRACT checklist): concept proposal and pilot.* Published: 20 June 2023. Author/s: Ben W. Mol, Shimona Lai, Ayesha Rahim, Esmée M. Bordewijk, Rui Wang, Rik van Eekelen, Lyle C. Gurrin, Jim G. Thornton, Madelon van Wely and Wentao L. Journal: Research Integrity and Peer Review 8:6 (2023).
- Research with an influence on policy was derived from an MRC award led by Phil Quinlan in which 'New Information Governance Framework for Federated Aggregate Level Queries on Unconsented Data' was developed.

b) **School of Veterinary Medicine and Science:** Professor Madeleine Campbell, Professor of Veterinary Ethics within the School, is also a leading expert on animal welfare, ethics and law (EBVS® European Veterinary Specialist in Animal Welfare Science, Ethics and Law). She is leading initiatives to develop ethical frameworks for the use of animals in sport; and is leading a project with the World Horse Welfare to implement a new ethical framework for competitive horse sports. She is, together with other staff within the school and external organisations, also currently leading a project on the development of an ethical framework to support the function of the veterinary animal care team.

Publications from staff relating to research ethics/integrity include:

- *Social Licence to Operate: What Can Equestrian Sports Learn from Other Industries?* Douglas J, Owers R, Campbell MLH. Animals (Basel). 2022 Aug 5;12(15):1987. doi: 10.3390/ani12151987.
- *Levels of Evidence, Quality Assessment, and Risk of Bias: Evaluating the Internal Validity of Primary Research.* Sargeant JM, Brennan ML, O'Connor AM. Front Vet Sci. 2022 Jul 12;9:960957. doi: 10.3389/fvets.2022.960957. eCollection 2022

2.8.3. Faculty of Social Science

- a) **School of Education:** Alan S. Marcus, Rotem Maor, Ian M. McGregor, Gary Mills, Simone Schweber, Jeremy Stoddard and David Hicks (2022) Holocaust education in transition from live to virtual survivor testimony: pedagogical and ethical dilemmas, *Holocaust Studies*, 28:3, 279-301, DOI: 10.1080/17504902.2021.1979176. This paper generated conversations and debate on research ethics.
- b) **Nottingham University Business School:** Gerardus Lucas was part of the consortium on a generalizability/replication paper: Delios, A.; Clemente, E.; Wu, T.; Tan, H.; Wang, Y.; Gordon, M.; Viganola, D.; Chen, Z.; Dreber, A.; Johannesson, M.; Pfeiffer, T.; Generalizability Tests Forecasting Collaboration; and Uhlmann, E.L. (2022)., "Examining the context sensitivity of research findings from archival data" *Proceedings of National Academy of Science of USA*, Vol. 119(30), e2120377119

2.8.4. Human Resources

The University has developed during the reporting period and successfully won a £1 million bid to the Wellcome Trust entitled "**REC-HURDLES: Revisiting Employment Contracts and Help for**

Under-represented Researcher groups to Develop, Lead and Excel” in September 2023. This research aims to directly address precarious employment practice and provide wider specialist career support for researchers, including removing barriers to career progression with targeted needs-based professional development support for researchers from disadvantaged and underrepresented groups. The research will conduct a root-and-branch review of the use and impacts of fixed term contracts for all researchers contributing to, supervising, managing, enabling and supporting the research ecosystem, irrespective of level of experience, or job family. The project will identify and share sector and internal existing good practices and evaluate them for transferability/scaling and co-create pilot models of less precarious employment with researchers, aiming for approval and resource to change employment practices.

2.8.5. University of Nottingham Ningbo China

Professor Cong Cao, Chair of the Ethics Committee (China) and a member of URIEC UK, was invited to co-edit a special issue of Global Public Policy and Governance, “Global Governance of Emerging Technologies.”

2.9. External Collaborations and Initiatives to Support Research Integrity

All Faculties have reported to have either contributed to or been involved in external events and activities in support of research integrity. For example:

2.9.1. School of Medicine: Cathy Merry is the current board member of the NC3Rs. Chris Denning gave a talk or presentation to University of Third Age (U3A) on the activity ‘Exploring with audiences from U3A on science, ethics and public engagement’ resulting in ‘Increase in requests for further information’ as the most significant outcome. Anna Grabowska, Cathy Merry, and Jennifer Ashworth were involved with the Animal Free Research UK visit and contributed through the following activity: ‘A group of six representatives from Animal Free Research UK, along with local MP Lillian Greenwood and her team, and a media film crew visited the Biodiscovery Institute. Prof Cathy Merry and Dr Jennifer Ashworth introduced the event by describing the importance of animal-free research, and how their research contributes to this. The participants reported an increased appreciation of the challenges and solutions to animal free research. A social media video was made of the visit, which reached a wider audience. There are now plans to hold similar outreach events with other societies including University of the Third Age.’

2.9.2. School of Health Sciences: The Research Integrity and Ethics Leads are both external members of the University of Nottingham School of Pharmacy Research Ethics Committee. Dr Wright is also an expert member of the NIHR Research for Patient Benefit Underrepresented Disciplines national panel. In addition, individual staff members within the School of Health Sciences hold positions which impact on research integrity, for example, roles on editorial boards and associate editorships of journals, membership of funding bodies (NIHR, national charities) and membership of professional bodies (Royal College of Physicians, Royal College of Nursing, Charter for Society of Physiotherapy, British Psychological Society, UK Society for Behavioural Medicine). The Co-Research Integrity and Ethics Lead is working with the Survivor Alliance (<https://www.survivoralliance.org/>) a lived experience led Non-Governmental Organisation, Kings College London and the Modern Slavery Policy and Evidence Centre (<https://modernslaverypec.org>) to develop guidelines and processes for the establishment of survivor led research ethics panels within the modern slavery sector. The School of Health Sciences is active in promoting research integrity through patient and public involvement (PPI) within all research projects and activities. Several research groups have dedicated PPI panels (for example Maternity, Nottingham Centre for the Advancement of Research into Supportive, Palliative and End-of-life Care (NCARE) and Mental Health). In addition, public engagement is supported by core funds and a dedicated academic member of staff at Director level.

2.9.3. School of Life Sciences:

- a) Dr Liz Simpson is a member of the National Research Ethics Committee and contributes to national discussions around ethical issues and improving diversity in clinical research. These

directly feed into her work, including advice to colleagues and supervision of students. Dr Simpson has also been a member of the School Research Ethics Committee for a few years and will become chair of the committee in September.

- b) Professor Ed Bolt is a member of the following committees: Microbiology Society Impact and Influence Committee; Scientific advisory board Amphista Therapeutics; BBSRC Panel 1 - Pioneer Awards; Guest editor for Frontiers in Molecular Biosciences; Grant reviewer internationally, in 2023 (in addition to UK funders) for ANR (France), ISF (Israel) and DFG (Germany). Prof. Bolt serves on Impact and Influence Committees at UK Societies, and on scientific advisory boards for implementing basic research in drug development and science policy. In the former role he is active with international colleagues and membership to set policy for Researcher culture and development. This activity is well aligned with his Researcher 'Champion' role in SoLS. In the latter Prof. Bolt advises companies and societies about how basic research discoveries, especially in CRISPR research, can and are impacting in industry and in society.
- c) Academic and research staff within SoLS that are members of UKRI funder panels are reminded at each panel meeting of their responsibilities, including towards research integrity.
- d) Pint of Science Event: During one of the Pint of Science (22nd-24th May) sessions, led by Prof Sara Goodacre, researchers discussed ethics in animal work and modern ethical approaches to museum collections. The event was attended by a variety of researchers from SoLS; however, the exact number and names were not recorded.
- e) National Research Ethics Committees (NREC): Dr Liz Simpson has contributed to national policy discussions to frame guidance on novel research designs and widening diversity in research participation through the NREC.

2.9.4. School of Veterinary Medicine and Science:

- a) Professor Richard Lea (Ethics Officer and Research Integrity Champion) and Dr Michael Clark represent the Committee for Animal Research and Ethics in the Association of Veterinary Ethics Committees (AVEC). This newly formed association, comprising 8 veterinary schools and 3 corporate veterinary groups, is designed to harmonise standards of ethical review and to provide a forum for discussion of ethics and research integrity issues.
- b) Professor Richard Lea consults contacts within the Veterinary Medicine's Directorate (VMD), as and when appropriate.
- c) Professor Madeleine Campbell, Professor of Veterinary Ethics is Chair of the British Veterinary Association's (BVA's) Ethics and Welfare Advisory Panel. This is a standing committee of the BVA Council. Its purpose is to advise the BVA Policy Committee and policy working groups on ethical and welfare issues to consider in the development of policy on all veterinary policy matters. This includes animal health and welfare, public health, and veterinary professional issues.
- d) Professor Madeleine Campbell is also Chair (since 1 Jan 2023) of the UK Government's Animal Welfare Committee. The AWC advises the Department for Environment, Food and Rural Affairs (Defra) and the Scottish and Welsh Governments on the welfare of animals.
- e) Professor Madeleine Campbell is also an Independent Director of the Greyhound Board of Great Britain and has led on the development of GBGB's new long-term welfare strategy 'A Good Life for Every Greyhound'. She also sits on Ethics Review Panels for organisations including the Royal College of Veterinary Surgeons and the Zoological Society of London and is a member of the FEI's (Federation Equestre Internationale) Equine Ethics and Well-Being Commission to address the involvement of horses in sport. In addition, she Chairs the newly established (Jan 2023) British Equestrian (BEF) Board's Equine Welfare and Ethics Advisory Group.
- f) The School's Committee for Animal Research and Ethics (CARE) reviews all research projects proposed to be undertaken in the school and provides regular advice and guidance to staff

and students on ethical implications arising from proposed research including whether research falls under the correct legislation. Specifically, this includes the Veterinary Surgeons Act (VSA), the Animals Scientific Procedures Act (ASPA), the Human Tissue Act (HTA), the Wildlife and Countryside Act, the US Endangered Species act, CITES and The Nagoya Protocol. ASPA projects are referred to the Animal Welfare Ethical Review Body (AWERB) for full review. Where appropriate, HTA and/or human clinical proposals are referred for review by the appropriate NHS Research Ethics Committee (REC), the NHS integrated research application system (IRAS) or to the Faculty REC.

The Animal Research Nexus programme, which Dr Pru Hobson-West is involved in, involves collaboration with individuals from external bodies including NC3Rs and MRC (see <https://animalresearchnexus.org/people/pac>)

2.9.5. School of Biosciences:

- a) Prof Millar and Dr Hudson-Shore (School of Biosciences) have a collaboration with the Fund for Replacement of Animals in Medical Experimentation (FRAME; 2019 onwards) to develop and run an annual Training School on Ethics, 3Rs and Experimental Design.
- b) The most recent Training School was held in collaboration with the University of Bergen, in Bergen, Norway in March 2023. A number of University of Nottingham staff and students attended. Members of CAB, Prof Millar and Dr Hudson-Shore have also developed a new 'Excellence in Research Practice' Training Work package integrating Research Ethics and Research Integrity training for the BBSRC doctoral training programme (DTP) 2020-2028.

2.9.6. School of Computer Science

- a) UKRI funded The Horizon CDT and Horizon/TAS Hub RRI project partner with ORBIT, based at DeMontfort University. Both projects bring together a network of over 80 industrial partners.
- b) UKRI funded RAI UK has partnered with Partnership on AI (<https://partnershiponai.org/>) which is a nonprofit coalition committed to the responsible use of artificial intelligence. They also collaborate with a number of industry partners and governmental organisations, including Department of Transport, 10 Downing Street, Government Office for Science, Maritime and Coastguard Agency and Metropolitan Police.
- c) Research Ethics and Integrity have been brought together for the Schools of Mathematical Sciences and Computer Science under the responsibility of the MCS Research Knowledge and Exchange Hub, within the Faculty of Science.

2.9.7. School of Physics and Astronomy:

- a) Profs. Burrage and Fromhold: Hosted the IoP's visiting Juno accreditation visit as a step towards submission of our Champion accreditation renewal document. As described in our Juno submission, the school has a strong track record for promoting female staff. Last year, the University introduced a Professorial pay banding scheme. Overall, 32% of our professors were moved to a higher pay band through this scheme, with 60% of our female Professors being recognised in this way.
- b) Prof. Fromhold: worked with colleagues to enable the school to join the IoP's "Levelling Up" scheme, which promotes Widening Participation (WP) by providing tuition and mentoring for A-level students. We are tutoring and mentoring 21 A-level students from WP catchment areas. More than half of those students are female, and half are Black, Asian, and Minority Ethnic (BAME). He gave a talk on Quantum technologies research to the cohort.
- c) Prof. Dewey: Helping researchers in low- and middle-income countries through AuthorAid, including co-authoring, mentoring, editing grant applications, job applications.

2.9.8. School of Psychology:

- a) Professor Jackson continues to serve on the editorial board of Cortex, which is amongst the first few journals of our discipline to make adherence to transparency and openness a

requirement for publication. Our ultimate objective is to achieve complete transparency of scientific methods and full open data (with fully documented and/or automated analysis pipelines and processes).

- b) As might be expected, the number of staff who are actively working with animals is a small proportion (N=5), but we make a significant contribution to promoting best practice at the national level. Prof. Cassaday was lead reviewer for the Guidelines for Psychologists Working with Animals the updated version of which was published by the British Psychological Society autumn 2020. Within the institution, Prof. Bonardi is currently a member of the Animal Welfare and Ethical Review Body.
- c) PhD student Hannah Slack recently co-hosted a webinar with Tourette's Action for members of the public on 'Understanding and supporting research into tics and Tourette's Syndrome'. This included discussion of the research ethics review process and questions about the research process, including 'why can it take a long time before the results of a study are published?'
- d) Academics and researchers in the School of Psychology are piloting a new Research Data Management Checklist which has been drafted by the Research Data Management working group. Ultimately the aim is to roll this out across the university. The Research Data Management working group is aiming to improve our research management data and processes to manage risk, and part of this activity is the development of a research data management checklist for use across the University. The School of Psychology kindly volunteered to pilot the checklist during the latter part of 2023. The working group will use the feedback to revise the checklist.
- e) Education: Dr Lenka Schnaubert, Assistant Professor in Learning Sciences, member of the UniWiND (University Association for the Qualification of Young Scientists in Germany) network "Teaching Good Scientific/Research Practice (GSP/GRP)" since 2019. This network is aimed at people who design, implement and/or are responsible for the content of offers on the topic of "Good Scientific Practice". The network exchanges knowledge and experiences on (teaching) formats, methods and materials, and to discuss and (further) develop common standards for GSP/GRP communication. The group develops practice-relevant and usable competency standards for GSP for different stages in higher education (roughly related to academic levels like bachelor, master, PhD, post doc, professor, RI professional (e.g., GSP-trainer, ombudsperson, university GSP guidelines developer)) based on the GSP Codex of the German Research Foundation which covers Standards of Good Research Practice (incl. responsibilities of individuals as well as institutions) but also Non-Compliance with GRP and Procedures.
- f) Dr Gary Winship, in his role as Editor-in-Chief of the British Journal of Psychotherapy, and as research lead for the Universities Psychotherapy and Counselling Association (UPCA) has been part of an international journal editors committee and has been developing guidelines for publishing case study material, developing a Psychotherapy Ethics Concordat. The school has membership with UniWiND (University Association for the Qualification of Young Scientists in Germany) network "Teaching Good Scientific/Research Practice (GSP/GRP)" and Universities Psychotherapy and Counselling Association (UPCA).
- g) Keynote:
 - i. Lowenthal, D., Payne, H., Winship, G., and Young, C. (2023). In conversation with psychotherapy journal editors. Plenary panel. UKCP Annual Conference. On-line. 2-3 June. 150 attendees.
 - ii. ii) Winship, G (2023) The ethics of qualitative case study data and writing for publication. UKCP Annual Conference. On-line. 2-3 June. 150 attendees.
 - iii) Winship, G (2023) Ethical challenges in case study research. Annual Conference of the International Association of Psychoanalytic Journal Editors. Goldwurm Auditorium, Mount Sinai Hospital. New York. Apr 22. 80 attendees.

2.9.9. School of Sociology and Social Policy: In the past year the school has engaged with:

- a) The British Psychology Service guidance on internet research.
- b) British Society of Criminology guidance on working with offenders and vulnerable groups.
- c) ESRC/UKRI ethics docs, during complex applications.

Best practice form other universities on issues relating to secondary trauma, verbal consent and remuneration for participation in research.

2.9.10. Libraries:

- a) RLUK (Research Libraries UK) and CILIP (professional libraries association) both have an interest in Research integrity and research ethics through their support for researchers as service users and patrons.
- b) University Libraries are also a member of the Digital Preservation Coalition which promotes the long-term preservation of the research output.

2.9.11. University of Nottingham Ningbo China

- a. Prof. Cong Cao moderated a plenary panel discussion at the Academy of International Business Asia Pacific Regional Conference, December 8, 2022, with the participation of Jin Chen, a research ethics officer at NUBS China. Other participants included:
 - Professor Lorraine EDEN, Dean of AIB fellows, Research Professor of Law and Professor Emerita of Management, Texas AandM University
 - Professor Denis G. ARNOLD, Surtman Distinguished Professor of Business Ethics, UNC Charlotte
- b. Cong Cao was invited to speak on research integrity in China at the Asia Pacific Research Integrity (APRI) Network Meeting 2023 in Tokyo, Japan in March 2023.
- c. Cong Cao was appointed an advisor to the Special Committee on Research Integrity and Responsible Innovation under the Chinese Association of Science of Science and Science and Technology Policy.

2.10. Internal Monitoring and Audit Processes

As noted earlier in this report, in July 2021, the University published a dedicated **Code of Practice for Research Ethics Committees (CoPREC)**²⁵. Whilst the *Code of Research Conduct and Research Ethics* outlines the guiding principles for conducting research, the CoPREC outlines the minimum expectations for the operation of Research Ethics Review Committees and specific guidance on the operation of School, Department or Faculty Research Ethics Review Committees (RECs) and associated processes, including review criteria. It was designed to ensure alignment of process and governance but also allow discipline-appropriate procedures to be implemented where appropriate and ensures that RECs are always independent in forming their opinions.

The CoPREC was designed to ensure alignment with the principles and standards of the [Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects](#) and draws from the joint publication '[Research Ethics Support and Review in Research Organisations](#)' by the UK Research Integrity Office (UKRIO) and the Association of Research Managers and Administrators (ARMA) to support the research community in achieving high standards of research ethics review. It also builds on the [UKRI ESRC framework for research ethics](#); [WHO ethical standards and procedures for research with human beings](#); and the [European Commission Ethics for Researchers](#).

URIEC will work with Faculties and Schools to ensure the implementation of the CoPREC and will evaluate and review the CoPREC on annual basis.

²⁵ <https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/University-Research-Integrity-and-Ethics-Committee-Research-Ethics-Committees.aspx>

The University Research Integrity and Research Ethics Committee (URIEC) has overall responsibility for monitoring research integrity and ethics. URIEC undertakes an annual monitoring review of all ethics committees operated by Schools and Faculties. The new/current monitoring requires the annual collection of qualitative and quantitative data through direct reports from each of the five faculties and the two international campuses. Each Faculty REC is responsible for managing and reporting on their schools-based RECs. The Head of Research Integrity, Risk and Compliance (Research and Innovation) collects all the relevant reports. These are then reviewed by URIEC, who highlights any issues and makes recommendations for any new policies that may need to be developed, identify training requirements, highlights good practice and areas for development.

The recently established Research Integrity, Risk and Compliance team have already started new internal audit process to assure compliance with Trusted Research, Nagoya protocol, the established bullying and harassment declarations, human tissue, and research governance requirements. The team are now establishing Research Risk Assurance framework to capture and ensure compliance with regulatory, contractual, ethical, and policy requirements across the board. We will report on these in future reports.

Section 3: Addressing Research Misconduct

3.1. Reporting and Handling Allegations of Research Misconduct

The University has relevant policies and procedures to respond to research misconduct; namely The Code of Practice on Handling Allegations of Research Misconduct²⁶, Policy on academic misconduct²⁷ Regulations of Academic Misconduct, Staff Disciplinary Procedure²⁸, Whistleblowing (Public Interest Disclosure) Code²⁹, Grievance Procedure³⁰ and the University of Nottingham Ethical Framework³¹.

These procedures have appropriate principles and mechanisms to ensure that investigations are thorough and fair, carried out in a transparent and timely manner, and protected by appropriate confidentiality.

As all these procedures and policies are reported into different administrative services, the University Research Integrity Officer (The Pro-Vice-Chancellor for Research and Knowledge Exchange) and the Head of Research Integrity are the main points of contact for reporting allegations of research misconduct at an institution level and the University's Head of Research Integrity ensures compliance with the Code of Practice on Handling Allegations of Research Misconduct and keeps a record of any investigations.

3.2. Anonymised Summary on Investigations into Allegations of Research Misconduct

The University's Code of Practice on Handling Allegations of Research Misconduct process provides clear definition of Research Misconduct and the procedures to be followed in line with guidance from UKRIO, UKRI, and the Advisory, Conciliation and Arbitration Service (ACAS). The University's proficiency in promoting and raising awareness of research integrity has increased, and consequently the number of cases on research misconduct investigated have decreased compared to the number of cases reported in previous years.

The Faculty Research Integrity Advisors and School Research Integrity and Ethics Champions roles have substantially supported the promotion of Research Integrity and excellence in research across the schools and raised awareness of ethical procedures, providing basic guidance to all

²⁶ <https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/Research-Misconduct.aspx>

²⁷ <https://www.nottingham.ac.uk/qualitymanual/assessment-awards-and-deg-classification/pol-academic-misconduct.aspx>

²⁸ <https://www.nottingham.ac.uk/hr/guidesandsupport/performanceatwork/disciplinaryprocedures/index.aspx>

²⁹ <https://www.nottingham.ac.uk/governance/otherregulations/whistleblowing/index.aspx>

³⁰ <https://www.nottingham.ac.uk/hr/guidesandsupport/complaintsgrievanceanddignity/grievance/index.aspx>

³¹ <https://www.nottingham.ac.uk/governance/otherregulations/ethical-framework.aspx>

researchers within the University. They have utilised the resources made available by UKRIO³² and the support provided centrally, to engage and raise awareness in this area.

The details of investigations into allegations of research misconduct reported this year are as below:

- Between **1 July 2022 and 30 June 2023**, several complaints were received throughout the period, the majority of which were resolved by mediation before any research misconduct taking place. All the complaints received by the Head of Research Integrity, Risk and Compliance did not fall with the research misconduct remit, as defined in the Code of Practice on Handling Allegations of Research Misconduct and the Concordat to Support Research Integrity. However, complainants were redirected to the appropriate procedures, relevant institutions or advised on the best course of action. It is noted that similar to the previous year, the disputes were mainly around authorship.
- Between **1 July 2022 and 30 June 2023**, only 1 PGR student has been investigated for **academic misconduct**. This case was due to be heard by an academic misconduct panel in August 2022, but there were some delays due pending completion of a Dignity related issue. The case was reported last year but wasn't concluded. The allegations were upheld whereby data was fabricated and falsified.

Reference No.	Staff/student	Funder	Fabrication	Falsification	Plagiarism	Misrepresentation	Breach of duty of care	Improper dealing with allegations	Other	Allegations upheld
n/a	Student (PGR)	n/a	1	1	0	0	0	0	0	1

Formal Investigations between 1 July 2022 and 30 June 2023

3.3. Lessons Learned and Identified Needs

Lessons learned assessment is undertaken after every complaint for the purpose of recording, sharing, avoiding any shortfalls identified, improving current standards and good practices, and contribute to organisational growth and maturity by achieving long term improvements in the way we embed and share best practices.

As noted in the previous annual statement; we have continued to raise awareness and provide clearer communications, for researchers at all levels. The introduction of Research Integrity Champions and Advisors had a positive impact due to their role, at local levels, for confidential advice and signposting to the appropriate training, guidance and policies. In addition to the latter, the Champions have played an important role in liaising with the Head of Research Integrity, Risk and Compliance to address queries and potential complaints coming their way.

4. Closing statement

This annual statement summarises the actions and activities that the University of Nottingham has undertaken to sustain and further enhance research integrity.

This statement draws a picture of the activities undertaken within the University of Nottingham in 2022-2023 academic year, but by no means a full picture of the commitment of our researchers (students and staff), administrative and professional services, and leadership to uphold the highest standards of rigour and integrity and their dedication.

This statement confirms the University's compliance with the Concordat to Support Research Integrity as stipulated under commitment 5 "*produce a short annual statement, which must be presented to their own governing body, and subsequently be made publicly available, ordinarily through the institution's website*".

³² <https://ukrio.org/research-integrity-resources/authorship/>